

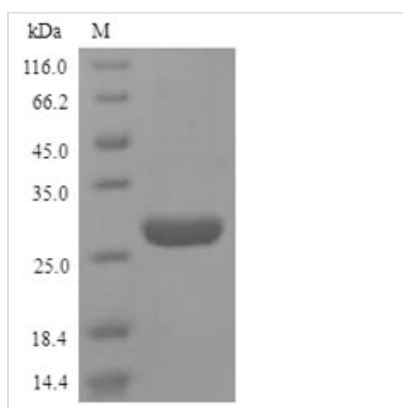


Recombinant Human High mobility group protein B1 (HMGB1)

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| Product Code | CSB-YP010553HU |
| Relevance | Multifunctional redox sensitive protein with various roles in different cellular compartments. In the nucleus is one of the major chromatin-associated non-histone proteins and acts as a DNA chaperone involved in replication, transcription, chromatin remodeling, V(D)J recombination, DNA repair and genome stability. Proposed to be an universal biosensor for nucleic acids. Promotes host inflammatory response to sterile and infectious signals and is involved in the coordination and integration of innate and adaptive immune responses. In the cytoplasm functions as sensor and/or chaperone for immunogenic nucleic acids implicating the activation of TLR9-mediated immune responses, and mediates autophagy. Acts as danger associated molecular pattern (DAMP) molecule that amplifies immune responses during tissue injury. Released to the Extracellular domain environment can bind DNA, nucleosomes, IL-1 beta, CXCL12, AGER isoform 2/sRAGE, lipopolysaccharide (LPS) and lipoteichoic acid (LTA), and activates cells through engagement of multiple surface receptors. In the Extracellular domain compartment fully reduced HMGB1 (released by necrosis) acts as a chemokine, disulfide HMGB1 (actively secreted) as a cytokine, and sulfonyl HMGB1 (released from apoptotic cells) promotes immunological tolerance (PubMed:23519706, PubMed:23446148, PubMed:23994764, PubMed:25048472). Has proangiogenic activity (By similarity). May be involved in platelet activation (By similarity). Binds to phosphatidylserine and phosphatidylethanolamide (By similarity). Bound to RAGE mediates signaling for neuronal outgrowth (By similarity). May play a role in accumulation of expanded polyglutamine (polyQ) proteins such as huntingtin (HTT) or TBP (PubMed:23303669, PubMed:25549101). |
| Abbreviation | Recombinant Human Hmgb1 protein |
| Storage | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |
| Uniprot No. | P09429 |
| Product Type | Recombinant Proteins |
| Immunogen Species | Homo sapiens (Human) |
| Purity | ≥ 90% as determined by SDS-PAGE. |
| Sequence | GKGDPPKPRGKMSSYAFFVQTCREEHKKKHPDASVNFSEFSKKCSERWKTM SAKEKGFEDMAKADKARYEREMKTYIPPKGETKKKFKDPNAPKRPPSAFFLF CSEYRPIKIGEHPGLSIGDVAKKLGEMWNNTAADDKQPYEKKAACLKEKEYEK DIAAYRAKGPDAAKKGVVKAESKSKKKEEEDEEDEDEDEDEDEDEDEDEDE EDDDDE |
| Research Area | Epigenetics and Nuclear Signaling |



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|--------------------------|---|
| Source | Yeast |
| Target Names | HMGB1 |
| Protein Names | Recommended name: High mobility group protein B1 Alternative name(s): High mobility group protein 1 Short name= HMG-1 |
| Expression Region | 2-215aa |
| Notes | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| Tag Info | N-terminal 6xHis-tagged |
| Mol. Weight | 26.8kDa |
| Protein Length | Full Length |

Image


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Shelf Life

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